Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

[[1)]] 1 (currently amended). A measuring device comprising:

a measured value processor;

a sensor arrangement ~~(2) to record~~ for recording values, ~~in particular angles and linear values, which produces~~ said sensor arrangement producing at least two signals phase-shifted to one another as a continuous function ~~and in which these signals are~~, said signals being supplied to [[a]] said measured value processor~~, characterized in that~~;

an adjustment unit ~~(7) is~~ being connected in series to ~~the~~ said sensor arrangement ~~(2)~~, ~~which adjusts the~~ said adjustment unit adjusting amplitudes of ~~the~~ said phase-shifted signals ~~(41, 42)~~ to one another and/or ~~produces~~ producing from said phase-shifted signals ~~(41, 42)~~ signals ~~which are~~ out of phase by about 90°, ~~which are~~ said produced signals being then evaluated and outputted for further processing.

[[2)]] 2 (currently amended). [[A]] The measuring device ~~as~~

~~recited in~~ according to claim 1, ~~characterized in that~~ wherein adjustment takes place at the times when ~~the~~ said phase-shifted signals intersect ~~the~~ a common reference.

[[3)]] 3 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein ~~the~~ said phase-shifted ~~sensor~~ signals have sinusoidal values.

[[4)]] 4 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein for any phase-shifted values the 90° phase-shift results from addition or subtraction of the values.

[[5)]] 5 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim [[1]] 2, ~~characterized in that~~ wherein ~~the~~ said common reference is created by producing ~~the~~ an average value of at least two values phase-shifted by 90°.

[[6)]] 6 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim [[1]] 2, ~~characterized in that~~ wherein ~~the~~ said common reference is firmly set.

[[7)]] 7 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein for non-symmetrical, calculated amplitudes of ~~the~~ particular

values, ~~their~~ a reference thereof is suitably adjusted in ~~the~~ said adjustment unit.

[[8)]] 8 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein ~~the~~ non-symmetrical, calculated distances of ~~the~~ intersections of ~~the~~ particular values with ~~the~~ a common reference are calculated by taking into account ~~their~~ an adjustment speed thereof and ~~their~~ a particular reference thereof is correspondingly adjusted in ~~the~~ said adjustment unit.

[[9)]] 9 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ further comprising an interpolator, ~~the~~ values resolved by [[an]] said interpolator ~~are~~ being calculated by taking into account their adjustment speed and, if they fluctuate from one another, their amplitudes ~~are~~ being adjusted accordingly.

[[10)]] 10 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein ~~the~~ distances of ~~the~~ sensors from one another are chosen independently of ~~the~~ a scale division.

[[11)]] 11 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein

the same measuring device is used for varying scale divisions.

[[12)]] 12 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein two values phase-shifted by 90° and an additional value phase-shifted by 180° are created from ~~the~~ said phase-shifted signals and used for evaluation.

[[13)]] 13 (currently amended). [[A]] The measuring device ~~as recited in~~ according to claim 1, ~~characterized in that~~ wherein ~~the~~ said adjustment unit ~~(7) and preferably also the whole electronics unit (8) including the sensor arrangement (2) are~~ is located on an ASIC equipped with fixed hardware functions for an integrated or mounted encoder ~~(1, 200)~~.

14 (new). The measuring device according to claim 1, wherein said sensor arrangement is for recording angles and linear values.

15 (new). The measuring device according to claim 1, wherein a whole electronics unit including said sensor arrangement is located on an ASIC equipped with fixed hardware functions for an integrated or mounted encoder.